

Sequence Listing

<110> SODE, Koji

<120> GLUCOSE DEHYDROGENASE

<130> 3691-0113PUS1

<140> US 10/517,702

<141> 2004-12-13

<150> PCT/JP03/07542

<151> 2003-06-13

<160> 19

<210> 1

<211> 454

<212> PRT

<213> Acinetobacter calcoaceticus

<400> 1

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Val | Pro | Leu | Thr | Pro | Ser | Gln | Phe | Ala | Lys | Ala | Lys | Ser | Glu | Asn | 1   | 5   | 10  | 15  |
| Phe | Asp | Lys | Lys | Val | Ile | Leu | Ser | Asn | Leu | Asn | Lys | Pro | His | Ala | Leu | 20  | 25  | 30  |     |
| Leu | Trp | Gly | Pro | Asp | Asn | Gln | Ile | Trp | Leu | Thr | Glu | Arg | Ala | Thr | Gly | 35  | 40  | 45  |     |
| Lys | Ile | Leu | Arg | Val | Asn | Pro | Glu | Ser | Gly | Ser | Val | Lys | Thr | Val | Phe | 50  | 55  | 60  |     |
| Gln | Val | Pro | Glu | Ile | Val | Asn | Asp | Ala | Asp | Gly | Gln | Asn | Gly | Leu | Leu | 65  | 70  | 75  | 80  |
| Gly | Phe | Ala | Phe | His | Pro | Asp | Phe | Lys | Asn | Asn | Pro | Tyr | Ile | Tyr | Ile | 85  | 90  | 95  |     |
| Ser | Gly | Thr | Phe | Lys | Asn | Pro | Lys | Ser | Thr | Asp | Lys | Glu | Leu | Pro | Asn | 100 | 105 | 110 |     |
| Gln | Thr | Ile | Ile | Arg | Arg | Tyr | Thr | Tyr | Asn | Lys | Ser | Thr | Asp | Thr | Leu | 115 | 120 | 125 |     |
| Glu | Lys | Pro | Val | Asp | Leu | Leu | Ala | Gly | Leu | Pro | Ser | Ser | Lys | Asp | His | 130 | 135 | 140 |     |
| Gln | Ser | Gly | Arg | Leu | Val | Ile | Gly | Pro | Asp | Gln | Lys | Ile | Tyr | Tyr | Thr | 145 | 150 | 155 | 160 |
| Ile | Gly | Asp | Gln | Gly | Arg | Asn | Gln | Leu | Ala | Tyr | Leu | Phe | Leu | Pro | Asn | 165 | 170 | 175 |     |
| Gln | Ala | Gln | His | Thr | Pro | Thr | Gln | Gln | Glu | Leu | Asn | Gly | Lys | Asp | Tyr | 180 | 185 | 190 |     |
| His | Thr | Tyr | Met | Gly | Lys | Val | Leu | Arg | Leu | Asn | Leu | Asp | Gly | Ser | Ile | 195 | 200 | 205 |     |
| Pro | Lys | Asp | Asn | Pro | Ser | Phe | Asn | Gly | Val | Val | Ser | His | Ile | Tyr | Thr | 210 | 215 | 220 |     |
| Leu | Gly | His | Arg | Asn | Pro | Gln | Gly | Leu | Ala | Phe | Thr | Pro | Asn | Gly | Lys | 225 | 230 | 235 | 240 |
| Leu | Leu | Gln | Ser | Glu | Gln | Gly | Pro | Asn | Ser | Asp | Asp | Glu | Ile | Asn | Leu | 245 | 250 | 255 |     |
| Ile | Val | Lys | Gly | Gly | Asn | Tyr | Gly | Trp | Pro | Asn | Val | Ala | Gly | Tyr | Lys | 260 | 265 | 270 |     |
| Asp | Asp | Ser | Gly | Tyr | Ala | Tyr | Ala | Asn | Tyr | Ser | Ala | Ala | Ala | Asn | Lys |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 275 |     | 280 |     | 285 |     |     |     |     |     |     |     |     |     |     |
| Ser | Ile | Lys | Asp | Leu | Ala | Gln | Asn | Gly | Val | Lys | Val | Ala | Ala | Gly | Val |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Pro | Val | Thr | Lys | Glu | Ser | Glu | Trp | Thr | Gly | Lys | Asn | Phe | Val | Pro | Pro |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Leu | Lys | Thr | Leu | Tyr | Thr | Val | Gln | Asp | Thr | Tyr | Asn | Tyr | Asn | Asp | Pro |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Thr | Cys | Gly | Glu | Met | Thr | Tyr | Ile | Cys | Trp | Pro | Thr | Val | Ala | Pro | Ser |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Ser | Ala | Tyr | Val | Tyr | Lys | Gly | Gly | Lys | Lys | Ala | Ile | Thr | Gly | Trp | Glu |
|     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |     |
| Asn | Thr | Leu | Leu | Val | Pro | Ser | Leu | Lys | Arg | Gly | Val | Ile | Phe | Arg | Ile |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Lys | Leu | Asp | Pro | Thr | Tyr | Ser | Thr | Thr | Tyr | Asp | Asp | Ala | Val | Pro | Met |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Phe | Lys | Ser | Asn | Asn | Arg | Tyr | Arg | Asp | Val | Ile | Ala | Ser | Pro | Asp | Gly |
|     |     |     | 405 |     |     |     |     | 410 |     |     |     |     |     | 415 |     |
| Asn | Val | Leu | Tyr | Val | Leu | Thr | Asp | Thr | Ala | Gly | Asn | Val | Gln | Lys | Asp |
|     |     | 420 |     |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Asp | Gly | Ser | Val | Thr | Asn | Thr | Leu | Glu | Asn | Pro | Gly | Ser | Leu | Ile | Lys |
|     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |     |
| Phe | Thr | Tyr | Lys | Ala | Lys |     |     |     |     |     |     |     |     |     |     |
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 ggaaaatttt gacaatttat aaggtggaca catgaataaa catttattgg ctaaaattgc 180  
 tttattaagc gctgttcagc tagttacact ctccagcatt gctgatgttc ctctaactcc 240  
 atctcaattt gctaaagcga aatcagagaa ctttgacaag aaagttattc tatctaattc 300  
 aaataagccg catgctttgt tatggggacc agataatcaa atttggttaa ctgagcgagc 360  
 aacaggtaag attctaagag ttaatccaga gtcgggtagt gtaaaaacag tttttcaggt 420  
 accagagatt gtcaatgatg ctgatgggca gaattggttta ttaggttttg ccttccatcc 480  
 tgatttttaa aataatcctt atatctatat ttcagggtaca tttaaaaatc cgaaatctac 540  
 agataaagaa ttaccgaacc aaacgattat tcgtcgttat acctataata aatcaacaga 600  
 tacgctcgag aagccagtcg atttattagc aggattacct tcatcaaaaag accatcagtc 660  
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 aagtattcca aaggataatc caagttttta cgggggtggt agccatattt atacacttgg 900  
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 aggcccaaac tctgacgatg aaattaacct cattgtcaaa ggtggcaatt atggttggcc 1020  
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cggaatgtc caaaaagatg atggctcagt aacaaataca ttagaaaacc caggatctct 1560  
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<223> Xaa is Met or Trp

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<223> synthetic oligonucleotide primer for point mutation

<400> 18

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